

## **REMARKS**

### **Claim status**

Claims 1-15 and 27-32 were pending in the case at the time of the current Office Action. Claims 1 is currently amended herein. Claims 3-4 and 6-15 are cancelled herein. Claims 1-2, 5 and 27-32 are currently pending in the application.

### **Specification**

The title has been amended herein simply to correct typographical errors.

### **Section 102 rejections**

In the current Office action, claims 1-15 and 27-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Starkweather (U.S. Patent 5,836,971), hereinafter, Starkweather.

Applicants respectfully traverse the foregoing rejections in view of the above pending claims and for reasons set forth hereafter.

Claims 3-4 and 6-15 are cancelled herein.

Independent claim 1 recites an arrangement for treatment of rhythm disturbances, especially tachycardia and fibrillation, of a heart, comprising:

a heart rhythm detector for detecting the heart rhythm and determining when an atrial fibrillation threshold limit is exceeded, wherein said atrial fibrillation threshold limit corresponds to a first predetermined heart rate value; and

a therapy device, connected to the heart rhythm detector, to begin to treat an atrial fibrillation episode when the atrial fibrillation threshold limit is exceeded;

wherein the heart rhythm detecting device determines whether an atrial redetection threshold limit, corresponding to a second predetermined heart rate value, is still exceeded immediately after the therapy device has treated the atrial fibrillation episode, the atrial redetection threshold limit being lower than the atrial fibrillation threshold limit and higher than a tachycardia threshold limit which corresponds to a third predetermined heart rate value, and

wherein the therapy device continues to treat the same atrial fibrillation episode as long as the heart rhythm detector determines that the atrial redetection threshold limit is exceeded.

It is respectfully submitted that Starkweather does not teach or suggest the invention of independent claim 1. In particular, Starkweather does not teach or suggest a heart rhythm detecting device determining whether an atrial redetection threshold limit, corresponding to a second predetermined heart rate value, is still exceeded immediately after the therapy device has treated the atrial fibrillation episode, the atrial redetection threshold limit being lower than the atrial fibrillation threshold limit and higher than a tachycardia threshold limit which corresponds to a third predetermined heart rate value.

The Examiner states in the current Office action that Starkweather expressly discloses the process for detection, treatment and redetection of a high rate ventricular tachycardia (VT), but that Starkweather does not expressly disclose the method for when the detected arrhythmia falls into the other rate zones disclosed.

Claim 1 of the present application is now directed to atrial fibrillation. The rate zone approach of Starkweather for discriminating ventricular tachycardia low, ventricular tachycardia high, and ventricular fibrillation cannot be applied to the atrium in an analogous way, as the Examiner seems to suggest, since AF and VF are different with respect to origin and consequences. Furthermore, Starkweather does not directly disclose lowering of the (re-) detection threshold for redetecting ventricular fibrillation but, instead, talks of a "pulling up" of the VT-low zone into the VT-high zone. Not even pulling up the VT high zone into the VF zone is explicitly mentioned. Therefore, it is by no means inherent or obvious to provide an AF-redetection threshold to be applied after an (unsuccessful) approach to treat an atrial fibrillation wherein the atrial fibrillation redetection threshold is lower than the original AF-detection threshold.

Therefore, in view of at least the foregoing, it is respectfully submitted that independent claim 1 is not anticipated by Starkweather, and it is respectfully submitted that independent claim 1 defines allowable subject matter. Also, since claims 2, 5 and 27-32 depend either directly or indirectly from claim 1, it is respectfully submitted that claims 2, 5 and 27-32 define

allowable subject matter as well. Applicants respectfully request that the rejection of claims 1-15 and 27-32 under 35 U.S.C. 102(b) be removed.

Accordingly, the applicant respectfully requests reconsideration of the rejections based on at least the foregoing. After such reconsideration, it is urged that allowance of all pending claims will be in order.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'David J. Muzilla', is written over a horizontal line.

David J. Muzilla  
Registration No. 50,914

Hahn Loeser & Parks LLP  
One GOJO Plaza  
Suite 300  
Akron, OH 44311-1076  
(330) 864-5550  
Fax 330-864-7986  
djmuzilla@hahnlaw.com

**CUSTOMER No. 021324**